

IN THE CLAIMS

1. (Previously Presented) A system for providing interactive content comprising:
hardware adapted to receive one or more first video streams that include video data, first interactive content and an interactive content code, wherein the interactive content code includes an option field, and wherein the hardware is further to produce a second video stream;
an interactive content code detector adapted to detect the interactive content code and the option field therein, and based on the value of the option field, to produce a control signal to indicate the first interactive content is to be replaced with second interactive content; and
a data insertion unit adapted to receive the control signal and to insert the second interactive content into the second video stream to produce a third video stream.
2. (Previously Presented) The system of claim 1 wherein the data insertion unit is positioned to insert interactive content into the second video stream prior to the third video stream being transmitted to a transmission source, causing the second interactive content to remain in the third video stream upon transmission.
3. (Previously Presented) The system of claim 1 wherein a video stream generator generates the first video stream, and the interactive content code detector is coupled to an output of the video stream generator.
4. (Previously Presented) The system of claim 1 wherein the interactive content code is received in a different stream from a stream used to carry the video data.
5. (Original) The system of claim 1 in which the interactive content code detector and the data insertion unit are coupled to a same point in the transmission path.

6. (Original) The system of claim 5 wherein the interactive content code is a universal resource locator and the data insertion unit inserts an interactive content corresponding to the universal resource locator.

7. (Previously Presented) The system of claim 1, wherein the interactive content code is located in a vertical blanking interval of the one or more first video streams, and wherein the interactive content code detector includes a vertical blanking interval line reader.

8. (Previously Presented) A method for providing interactive content in a broadcast facility that transmits a video broadcast stream containing video along a transmission path for delivery to end users and contains equipment that may corrupt interactive content, the method comprising:

encrypting an interactive content code to include with first interactive content,
resulting in an encrypted interactive content code wherein the interactive content code includes an option field;

inserting the encrypted interactive content code into a first video stream based on
a value of the option field, resulting in a second video stream with

embedded interactivity, wherein the encrypted interactive content code
specifies second interactive content to replace the first interactive content;

processing the second video stream, to produce a third video stream; and

inserting the second interactive content corresponding to the interactive content
code into the third video stream, to produce a fourth video stream, which
includes the second interactive content and the encrypted interactive
content code.

9. (Original) The method of claim 8 wherein inserting an interactive content further comprises inserting an interactive content corresponding to the interactive content code at a point in the transmission path after a last point in the transmission path where the interactive content may be corrupted.

10. (Previously Presented) The method of claim 8, further comprising reading the encrypted interactive content code at a point in the transmission path prior to an interactive content in the second video stream being corrupted.

11. (Previously Presented) The method of claim 8 wherein the embedded interactive content code is inserted into a region of the second video stream that is preserved by the broadcast facility.

12. (Previously Presented) The method of claim 8, further comprising reading the encrypted interactive content code, wherein the interactive content is inserted into the third video stream at a same point in the transmission path at which the encrypted interactive content code is read.

13. (Previously Presented) The method of claim 12, further comprising reading the encrypted interactive content code, wherein the encrypted interactive content code is read at a point in the transmission path after which broadcast facility equipment that may corrupt an interactive content is coupled to the transmission path.

14. (Previously Presented) A method for providing interactive content in a broadcast facility that transmits a video broadcast stream containing video for delivery along a transmission path to end users and contains equipment that may corrupt interactive content, the method comprising:

encrypting an interactive content code, resulting in an encrypted interactive content code wherein the interactive content code is encrypted in a manner to prevent ad skipping and includes an option field;

inserting the encrypted interactive content code into a first video stream including first interactive content, resulting in a second video stream with embedded interactivity, wherein the interactive content code specifies second interactive content to accompany a video broadcast based on the value of the option field, and wherein the encrypted interactive content code is inserted into a region of the second video stream that is preserved by the broadcast facility;

processing the second video stream, to produce a third video stream; and

inserting the second interactive content based on the interactive content code and the option value into the third video stream at a point in the transmission path after a point in the transmission path where broadcast facility equipment that may corrupt the interactive content is coupled to the transmission path, to produce a fourth video stream.

15. (Previously Presented) The method of claim 14 wherein inserting the encrypted interactive content code further comprises inserting a plurality of encrypted interactive content codes in different regions of the second video signal.

16. (Previously Presented) The method of claim 15 wherein at least one of the different regions is preserved by at least one local subsystem.

17. (Previously Presented) A method for providing interactive content in a broadcast facility that transmits a video stream containing video for delivery along a transmission path to end users, the method comprising:

inserting an encrypted reference to second interactive content into a region of a first video stream including first interactive content, wherein the encrypted reference is encrypted in a manner to prevent ad skipping and includes an option field, and wherein the region is preserved by the broadcast facility, resulting in a second video stream with embedded interactivity;

processing the second video stream, to produce a third video stream; and

inserting the second interactive content based on the encrypted reference and the option field into the third video stream, to produce a fourth video stream.

18. (Previously Presented) The method of claim 17 wherein inserting the encrypted reference further comprises inserting an encrypted Universal Resource Locator, which includes a link to the second interactive content, into the region of the first video stream that is preserved by the broadcast facility.

19. (Previously Presented) A system for providing interactive content comprising:

hardware adapted to receive a first video stream that includes video data, first interactive content, and one or more encrypted interactive content codes, and to produce a second video stream, wherein each encrypted interactive content codes is encrypted in a manner to prevent ad skipping and include an option field;

an interactive content code detector, coupled to the first video stream, adapted to detect one or more interactive content codes identified within the one or more encrypted interactive content codes and to produce a control signal responsive to detecting and processing an interactive content code and its associated option field; and

a data insertion unit, coupled to the interactive content code detector, adapted to receive the control signal and to insert second interactive content into the

second video stream responsive to information contained in the control signal, resulting in a third video stream to be transmitted to one or more local subsystems, wherein the data insertion unit is positioned to insert interactive content into the second video stream prior to the third video stream being transmitted to a transmission source, causing the interactive content to remain in the third video stream upon transmission.

20. (Previously Presented) A system for providing interactive content comprising:
 - local equipment, adapted to receive one or more first signals from a broadcast facility, wherein the one or more first signals include video data, first interactive content, and one or more encrypted interactive content codes, wherein the one or more encrypted interactive content codes are encrypted in a manner to prevent ad skipping and include an option field, and wherein the local equipment is further to produce a first video stream;
 - an interactive content detection unit adapted to detect an interactive content code identified within an encrypted interactive content code and to transmit a control signal responsive to detecting and processing the interactive content code and the option field; and
 - a data insertion unit, coupled to the interactive content code detector, adapted to receive the control signal and to insert second interactive content into the first video stream responsive to information contained in the control signal, resulting in a second video stream.
21. (Previously Presented) The system of claim 20 wherein the data insertion unit is positioned to insert interactive content into the first video stream prior to the second video stream being transmitted to customer premise equipment, causing the interactive content to remain in the second video stream upon transmission.
22. (Original) The system of claim 20 in which the interactive content code detector and the data insertion unit are coupled to a same point in the transmission path.

23. (Original) The system of claim 20 wherein the interactive content code is a universal resource locator and the data insertion unit inserts an interactive content corresponding to the universal resource locator.

24. (Original) The system of claim 20, wherein the interactive content code detector is a vertical blanking interval reader.

25. (Previously Presented) A method of ensuring reliable delivery of interactive content comprising:

inserting a plurality of encrypted interactive content codes including corresponding option fields into different regions of data in a video stream to be broadcast to a plurality of local subsystems, wherein the interactive content codes correspond to an interactive content to be inserted into the video stream based on values associated with respective option fields, wherein the plurality of encrypted interactive content codes is encrypted in a manner to prevent ad skipping, and wherein each region of data is preserved by at least one local subsystem.

26. (Previously Presented) A method of ensuring reliable delivery of interactive content comprising:

inserting an encrypted interactive content code into a closed caption region of a video stream, wherein a first portion of the interactive content code corresponds to second interactive content to be inserted into the video stream to replace first interactive content and a second portion of the interactive content code includes an option field composed of conditions for replacing the first interactive content with the second interactive content, and wherein the closed caption region is preserved by at least one local subsystem.

27. (Previously Presented) A method of increasing a reliability for delivery of interactive content, the method comprising:

inserting an encrypted interactive content code into a first component of a first signal alternate to a second component, which includes first interactive content and is used to convey the first interactive content, wherein the encrypted interactive content code is encrypted in a manner to prevent ad skipping and includes an option field;

processing the first signal, to produce a second signal;

detecting an interactive content code and the option field identified by the encrypted interactive content code in the first signal; and

inserting second interactive content corresponding to the interactive content code into the second signal and based on a value of the option field, to produce a third signal.

28. (Previously Presented) The method of claim 8, wherein encrypting the interactive content code comprises disarranging elements of the interactive content code to produce a scrambled interactive content code.

29. (Previously Presented) A method comprising:

receiving a first video stream, the first video stream including video data, first interactive content, and an interactive content code;

generating a second video stream based on the first video stream;

detecting an option field in the interactive content code;

based on a value of the option field, selectively replacing the first interactive content in the second video stream with second interactive content to produce a third video stream; and

transmitting the third video stream to a destination.

30. (Previously Presented) The method of claim 29, wherein the interactive content code is present in a region in the first video stream that is preserved by a broadcast facility.

31. (Previously Presented) The method of claim 30, wherein the interactive content code is present in a vertical blanking interval of the first video stream.

32. (Previously Presented) The method of claim 29, wherein the interactive content code is a universal resource locator.